Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
IP-Enabled Services	)	WC Docket No. 04-36
	)	
E-911 Requirements for IP-Enabled Service Providers	)	WC Docket No. 05-196
	)	

COMMENTS OF MOTOROLA, INC.

I. INTRODUCTION

Motorola, Inc. ("Motorola") respectfully submits these comments in response to the Commission's Notice of Proposed Rulemaking in the above-captioned proceeding ("*NPRM*").[1] In this *NPRM*, the Commission seeks comment on ways in which it can facilitate the development of VoIP E-911 capabilities, including those used in conjunction with common carrier wireless broadband connections.[2] As a developer of wireless VoIP solutions, Motorola urges the Commission to proceed with caution before broadly imposing specific E-911 obligations and deadlines on the nascent wireless VoIP market.[3]

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1 *IP-Enabled Services, E-911 Requirements for IP-Enabled Service Providers*, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 10245 (2005).

2 *Id.* at ¶¶ 57, 59.

3 Motorola concurs with the FCC's implicit conclusion that only common carrier and public for-hire wireless providers should be subject to the FCC's E-911 regulations. *See* 47 C.F.R. § 20.18(a); *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Report and Order, 11 FCC Rcd 18676 (1996). The FCC should not alter its wise policy of not imposing E-911 requirements on private system networks, such as those used predominantly for internal communications by police forces, fire departments, and utilities.

II. THE COMMISSION SHOULD NOT IMPOSE SPECIFIC E-911 REQUIREMENTS AT THIS TIME FOR WIRELESS VOIP.

The imposition of specific technical E-911 requirements or speculative deadlines on wireless VoIP at this time would be premature and could well be counterproductive. The wireless industry is only beginning to develop wireless VoIP systems and solutions. As currently envisioned by some, consumers will eventually be able to use wireless VoIP as part of their ability to experience true seamless mobility. Consumers may soon be able to choose from among, or choose a combination of, a variety of technology platforms, including cellular, PCS, Wi-Fi, WiMAX, and unknown other technologies. Much of this technology, however, is not yet deployed and continues to evolve.

In conjunction with the development of these technologies, the wireless industry is actively working to develop E-911 capabilities for various forms of wireless VoIP. Indeed, several groups are in the process of testing a variety of E-911 capabilities that will ultimately be used in wireless VoIP, such as 3GPP, 3GPP2, and TIA. Also, NENA is developing a standards requirements document from the perspective of PSAPs that will be an important baseline for the industry standards development.

Predominantly, these efforts surround development of IP Multimedia Subsystem ("IMS") standards. IMS is an access protocol – and device agnostic – specification that allows the interoperability between wireline and wireless network architectures. This framework enables wireline, wireless, and cable operators to offer a new generation of multimedia services across both legacy circuit switched-based and new packet switched-based networking infrastructures. The developers of the IMS standard are considering 911 and E-911 requirements as part of the development and integration process. This work will ensure that consumers can have access to E-911 capabilities over wireless VoIP technologies.

Even with these ongoing efforts, however, the June 2006 deadline for providing E-911 for wireless VoIP technologies, proposed by the Commission, is too ambitious given the current state of this technology. Many of the IP-based wireless technologies are still going through foundational decisions and early-stage evolutions in their make-up.[4] Considerable uncertainty still exists about which will be used, by whom, and for what. Any significant developments in any of these factors could directly impact the 911 needs, capabilities, and technology realities for these services, systems, and products. Given that industry is fully committed to meeting this public interest need by staying on top of the evolving technologies and including 911 solutions appropriate to the key factors and technology capabilities of the systems, specific government mandates are unnecessary and might actually hamper the efforts to develop the best solutions.

In addition, development of effective 911 solutions through standards setting bodies will provide the industry with more flexibility to experiment with different technologies. The industry will be able to develop the most appropriate and effective solutions that will provide a base level of capability quickly and that can then be built on or modified to allow for better performance and other capabilities.[5] Such an approach provides the public with E-911 capabilities in the most expeditious manner while also allowing for the evolution of such

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[4] For example, mobile WiMAX (802.16e) has not been finalized by the IEEE and no equipment is in the market. The standard is expected to be completed late 2005 and product availability will begin late 2006 / early 2007. E-911 interoperability for mobile WiMAX will be addressed in the certification process of the WiMAX Forum after the standard is completed.

[5] This is precisely what likely would have happened with wireless E-911. Several wireless providers adopted technologies that were able to provide base E-911 capabilities, but ultimately were unable to provide the requisite accuracy. These technologies could have been useful in providing some level of automatic location information while more accurate methods for providing this information were being developed. *See, e.g.*, *Cingular Wireless LLC*, Order, 18 FCC Rcd 11746 (2003) (adopting a Consent Decree that terminated an investigation into Cingular Wireless's failure to meet the specified accuracy requirements even though its solution was able to provide a base level of ALI capabilities).

capabilities.

There are also a variety of issues that need to be addressed regarding the development of full E-911 capabilities for wireless VoIP. For instance, a wireless VoIP user might at times be on a landline network, and at other times on a Wi-Fi network and the device user may be switched between different providers during the same VoIP communication. Accordingly, as part of the development of wireless VoIP, the wireless industry is working to determine how to hand off 911 calls from one provider's network to another provider's network as the customer moves to a new technology, for example, to a Wi-Fi network. It is often impossible to predict what issues may arise before a 911 solution can be fully implemented within the context of any technology that is still evolving. Any attempt by regulators to mandate specific E-911 capabilities at this time, before the parameters of even the *basic* implementation, interactions, and uses of different systems is settled, would inevitably misapprehend or disregard key issues related to 911 functionality, resulting in either an ineffective or out-dated solution.

III. CONCLUSION

The wireless industry is fully committed to developing E-911 capabilities for wireless VoIP. Industry, however, must be given sufficient time and adequate discretion to develop these solutions. The imposition of detailed E-911 requirements or premature deadlines will undermine the development of these capabilities by requiring "guesstimate" solutions and time-frames before it is possible to reasonably assess whether they will be achievable, adequate, or optimal, ultimately delaying deployment of effective E-911 capabilities to the public. Accordingly, the Commission should refrain from imposing specific E-911 requirements or deadlines on wireless VoIP at this time, and instead should allow (and work with) the industry to develop a workable

solution. Finally, the Commission should continue its policy of applying its E-911 obligations only to systems and services offered to the general public.

Respectfully submitted,

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